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09/800,102	03/05/2001	Craig Dube	APB-025	2740
959	7590	09/28/2004	EXAMINER	
LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109			LE, DIEU MINH T	
			ART UNIT	PAPER NUMBER
			2114	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/800,102

Applicant(s)

DUBE ET AL.

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/05/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Part III DETAILED ACTION**

**Specification**

1. Claims 21-49 are presented for examination.

**Double Patenting Rejections**

2. Claims 21-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. patent 6,199,172. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed subject matter contains obvious modifications to previous claims 1-19 of U.S. patent 6,199,172.

As to claims 1 and 18, these claims include limitations of: monitor contact status [determining the responsiveness] of a plurality of network devices in the communications network, determining that a first network device has lost contact with a second network device, employing a proxy network device to attempt to contact the second network device, and utilizing the response to determine the responsiveness of the second network device, which already included in claims 1-19 of U.S. patent 6,199,172. It is well settled that the omission of an element and its function [i.e., list of proxy network devices] is an obvious expedient if the remaining elements perform the same

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function as before. In re Karlson, 136, USPQ 184 (CCPA 1963).

Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969).

Therefore, omitting various elements from the previous claimed subject matter would have been obvious to one of ordinary skill in the art in this case since the remaining elements do in fact perform the same functions as before. Elimination/Changing of an element or its function will not serve as a basis for patentability.

3. The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. *In re Vogel*, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d).

**Claim Rejections - 35 USC § 103**

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35

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U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 21-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (U.S. Patent 5,065,399 hereafter referred to as Hasegawa) in view of Marbaker et al. (U.S. Patent 5,229,988 hereafter referred to as Marbaker).

As per claim 21:

Hasegawa substantially teach the invention. Hasegawa teaches:

A method of fault management in a communications network [abstract, col. 1, lines 63-65];

comprising:

- providing a management service to monitor a contact status for each of a plurality of network devices in the communications network [col. 1, lines 30-37 and lines 63-65];
- when the management service determines that a first network device has lost contact with a second network device [col. 4, lines 3-7]; and

- the management service utilizing the response to determine the responsiveness of the second network device [fig. 3, col. 1, lines 38-43 and col. 4, lines 51-62].

Hasegawa does not explicitly teach:

- a proxy network device to attempt to contact the second network device, wherein the proxy network device issues a response to the management service on the success of such attempt.

However, Hasegawa does disclose capability of:

- A rapid restoration of a telecommunication path between network nodes after an interrupting network link failure [abstract, fig. 1-4, col. 8, lines 25-37] comprising capabilities of:

- restoration of a network failure procedure including reconfiguring communication paths between communication nodes and exchanging processing messages (i.e., proxy network process) [col. 2, lines 13-23];

In addition, Marbaker explicitly teaches:

- A system and method for distinguishing proxy in a telecommunication network including network responding and monitoring [abstract, fig. 5, col. 7, lines 8-12];  
comprising:

- a network monitor and test manger used for monitoring node devices [col. 1, lines 32-34];
- a proxy capability in supporting the network communication, network analysis, and network problems (i.e., duplicating of addresses, network node failure, etc...) [col. 3, lines 16-54].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the **proxy capability in supporting the network communication, network analysis, and network problems (i.e., duplicating of addresses, network node failure, etc...) via its network monitor and test manager** as taught by Marbaker in conjunction with the rapid restoration of a telecommunication path between network nodes after an interrupting network link failure as disclosed by Hasegawa in order to enhance the network fault management system, more specifically to ensuring failure communication nodes identified, communicated, and recovered in a timely manner. One of ordinary skill in the art would have been



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motivated to do so to improve the entire network nodal interconnectivity's data throughput, data availability, and data operation.

As per claims 22-24 and 29-30:

Hasegawa further teaches:

- a registration service of network device (i.e., network device initiation, network comparison, network identification, network ranking, network reconstruction, and network restoration) [col. 4, lines 4-7, col. 4, lines 19-27, col. 5, lines 10-16, col. 5, lines 17-21, col. 6, lines 51-54, col. 8, lines 10-16];
- a first network device has lost contact with a second network device [col. 4, lines 3-7]; and

Hasegawa does not explicitly teach:

- a proxy network device to attempt to contact the second network device.

However, Hasegawa does disclose capability of:

- A rapid restoration of a telecommunication path between network nodes after an interrupting network link failure

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[abstract, fig. 1-4, col. 8, lines 25-37] comprising capabilities of:

- restoration of a network failure procedure including reconfiguring communication paths between communication nodes and exchanging processing messages (i.e., proxy network process) [col. 2, lines 13-23];

In addition, Marbaker explicitly teaches:

- A system and method for distinguishing proxy in a telecommunication network including network responding and monitoring [abstract, fig. 5, col. 7, lines 8-12];

comprising:

- a network monitor and test manger used for monitoring node devices [col. 1, lines 32-34];
- a proxy capability in supporting the network communication, network analysis, and network problems (i.e., duplicating of addresses, network node failure, etc...) [col. 3, lines 16-54].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the proxy capability in supporting the network communication, network analysis, and network problems (i.e.,

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duplicating of addresses, network node failure, etc...) via its network monitor and test manager as taught by Marbaker in conjunction with the rapid restoration of a telecommunication path between network nodes after an interrupting network link failure as disclosed by Hasegawa for the same reasons set forth as described in claim 21, *supra*.

As per claims 25-27:

Hasegawa further teaches:

- network is one or more of a physical device and a software application [fig. 1-4, col. 3, lines 50 through col. 4, lines 27];
- different protocol used among network devices (i.e., SONET, UNIX, ISDN, etc...) [col. 1, line 66, col. 2, line 7, col. 5, line 40].

Hasegawa does not explicitly teach:

- a proxy network device to attempt to contact the second network device.

However, Hasegawa does disclose capability of:

- A rapid restoration of a telecommunication path between network nodes after an interrupting network link failure

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[abstract, fig. 1-4, col. 8, lines 25-37] comprising capabilities of:

- restoration of a network failure procedure including reconfiguring communication paths between communication nodes and exchanging processing messages (i.e., proxy network process) [col. 2, lines 13-23];

In addition, Marbaker explicitly teaches:

- A system and method for distinguishing proxy in a telecommunication network including network responding and monitoring [abstract, fig. 5, col. 7, lines 8-12];

comprising:

- a network monitor and test manger used for monitoring node devices [col. 1, lines 32-34];
- a proxy capability in supporting the network communication, network analysis, and network problems (i.e., duplicating of addresses, network node failure, etc...) [col. 3, lines 16-54].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the proxy capability in supporting the network communication, network analysis, and network problems (i.e.,

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duplicating of addresses, network node failure, etc..) via its network monitor and test manager as taught by Marbaker in conjunction with the rapid restoration of a telecommunication path between network nodes after an interrupting network link failure as disclosed by Hasegawa for the same reasons set forth as described in claim 21, **supra**.

As per claim 28:

Hasegawa does not explicitly teach:

- the management service is implemented in objected-oriented programming and maintains a model of each network device.

However, Hasegawa does disclose capability of:

- A rapid restoration of a telecommunication path between network nodes after an interrupting network link failure [abstract, fig. 1-4, col. 8, lines 25-37] comprising capabilities of:
  - network analysis via hop count and neighboring nodes via real time process (objected-oriented programming) [col. 7, lines 15-16];

In addition, Marbaker explicitly teaches:

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- A system and method for distinguishing proxy in a telecommunication network including network responding and monitoring [abstract, fig. 5, col. 7, lines 8-12]; comprising:
  - network nodal programming and reprogramming in a network environment (objected-oriented programming) [col. 3, lines 61-63].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to realize both the Marbaker's network nodal programming and reprogramming in a network environment and Hasegawa's network analysis via hop count and neighboring nodes via real time process do apply and perform the network management within *objected-oriented programming (OOP)* arena. This is because the network nodal analysis as taught by Marbaker and Hasegawa implicitly used the OOP to simulate the data path, to analyze the node failure rate, to predict mode failure ration, etc... in order to improve the network communication operation. In addition, the OOP is well known in the art of network failure or fault management system, more specially in the network telecommunication nodal and path failure management.

As per claims 31-40:

Due to the similarity of claims 31-40 to claims 21-30 except for a fault management system comprising a management service for monitor a contact status of network devices, a plurality of proxy network devices, etc... instead of a method of fault management in a communication network comprising a management service to monitor a contact status for network devices, proxy network devices, etc...therefore, these claims are also rejected under the same rationale applied against claims 21-30. In addition, all of the limitations have been noted in the rejection as per claims 21-30.

As per claims 41-49:

Due to the similarity of claims 41-49 to claims 21-30 except for a method of testing [Marbaker, col. 1, lines 32-41] the responsiveness of a device in a communication network comprising a management service to monitor a contact status for network devices, proxy network devices, etc... instead of a method of fault management in a communication network comprising a management service to monitor a contact status for network devices, proxy network devices, etc...therefore, these claims are also rejected under the same rationale applied against claims

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21-30. In addition, all of the limitations have been noted in the rejection as per claims 21-30.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703)305-9408 [NOTE: After approximately October 15, 2004, I can be reached at the new number (571) 272-3660]. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703)305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**DIEU-MINH THAI LE**  
**PRIMARY EXAMINER**  
**ART UNIT 2114**

DML  
9/16/04